

III. In the Specification (Clean Sheet)

Paragraph beginning on page 7, line 27:

The term "sulfhydryl protecting group" or "cysteine protecting group" means a reversibly bound chemical group which prevents formation of intra- and intermolecular disulfide bonds, but does not interfere with the process of protein purification. In a preferred embodiment, the "sulfhydryl protecting group" consists of sulfate groups bound through sulfitylation with sodium sulfite. Numerous other reversible derivatizing reagents for cysteine sulfhydryls have been developed including disulfide compounds such as pyridyl disulfide, and the alkylalkanethiosulfonates. The sulfhydryl modification by these reagents is often facile, although their steric properties may interfere with protein activity or bioprocessing. Other sulfhydryl-reactive chemistries with potential utility in simplifying troponin I purification, recovery and storage include cyanylation and aminoethylation, reaction with compounds containing maleimide functional group such as N-ethyl maleimide, vinyl sulfones, and alkyl halides such as iodoacetic acid and amide. However, these sulfhydryl modifying groups have the disadvantage of poor reaction reversibility, making regeneration of the free sulfhydryl sidechains of the protein cysteines more difficult.